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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,099	12/11/2000	Bernd Fischer	D078 1090	2645
7590	10/18/2004		EXAMINER	
James F Vaughan Womble Carlyle Sandridge & Rice PO Box 725388 Atlanta, GA 31139-9388			DICUS, TAMRA	
			ART UNIT	PAPER NUMBER
			1774	
DATE MAILED: 10/18/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/700,099

Applicant(s)

FISCHER ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 16-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfaendner et al., U.S. Pat. No. 6,362,278 B1 in view of Schwonke et al., U.S. Pat. No. 6,224,804 B1.
3. Pfaendner shows carpet flooring comprising at least one grafted copolymer (column 20, lines 57-67) and polyolefins comprising ULDPE (VLD PE and LLDPE) (column 25, lines 11-22). Pfaendner shows that the grafted copolymer is a grafted copolymer comprising maleic anhydride grafted to HD polyethylene (column 20, lines 57-67). Pfaendner shows that the grafting degree is from 0.05-15% (column 21, lines 52-53). Pfaendner shows that the novel compatibiliser/stabilizer compounds are added to the polymer to be stabilized in amounts of 0.5-30% (column 24, lines 60-63). See also col. 22, lines 51-col. 24. Pfaendner shows that the flooring comprises pigments (column 25, lines 36-53) per instant claim 13. Pfaendner does not specifically show that the ULDPE has a density of less than 0.910 in instant claim 1 or 25 or that the density is from 0.85-0.892 g/cm³ as in instant claim 2. Schwonke shows an elastomer floor covering wherein the density of at least one elastomer based on a polyolefin of PE-VLD (ULDPE) is less than 0.918 g/cm (column 1 lines 55-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the elastomer floor covering

of Pfaendner with an ULDPE with the densities as in the instant invention since it is known that such an elastomer helps to provide a flooring with low-emission, no discoloration, and prevention of unpleasant odors. Though Pfaendner shows that the flooring comprises copolymers of ethylene and octene (column 23, lines 1-27), Pfaendner does not show the polyolefin mixture of at least two ethylene copolymers with the densities as in instant claim 4. Schwonke shows that the elastomer comprises a copolymer of ethylene wherein the density of the polyolefins is about 0.85 to 0.892 (claim 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the elastomer floor covering comprising copolymers of ethylene and octene of Pfaendner with the densities as in the instant invention since it is known that such an elastomer helps to provide a flooring with low-emission, no discoloration, and prevention of unpleasant odors. Though Pfaendner shows that the flooring comprises crosslinked polyethylene (column 22, lines 49-60), Pfaendner does not show that the elastomer is cross-linked with at least one cross-linking agent based on organic peroxides as in instant claim 11. Schwonke shows that the elastomer is cross-linked with an organic peroxide (column 1, line 66 to column 2, line 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the elastomer floor covering comprising elastomers cross-linked with an organic peroxide since it is known that such an elastomer provides a flooring with low-emission, no discoloration, and prevention of unpleasant odors. Though Pfaendner shows that the flooring comprises crosslinked polyethylene (column 22, lines 49-60), Pfaendner does not show that the elastomer is co-cross-linked with isocyanuric acid derivatives as in instant claim 12. Schwonke shows that the elastomer is cross-linked with cyanuric acid derivatives (claim 14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the elastomer floor

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covering comprising elastomers cross-linked with cyanuric acid derivatives since it is known that such an elastomer is a process enhancing additive. Schwonke does not show the weight ratio of the at least two ethylene copolymers as in instant claims 5 & 9. However, such a ratio is a property which can be easily determined by one of ordinary skill in the art. With regard to the limitation of the ratio, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. ratio) fails to render claims patentable in the absence of unexpected results. All of the aforementioned limitations are optimizable as they control the rheology and elasticity of the flooring. As such, they are optimizable. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the flooring with the limitation of the weight ratios since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

4. Claim 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfaendner et al., U.S. Pat. No. 6,362,278 B1 in view of Schwonke et al., U.S. Pat. No. 6,224,804 B1.

5. Pfaendner is relied upon as above for claims 1 and 13. Pfaendner does not show a mixture of filler comprising mineral intergrowths as in instant claim 14. Pfaendner does not show a variable color pattern and a homogenous design as in instant claim 15. Schwonke shows an elastomer floor covering comprising pigments, quartz powder, kaoline, and talc (column 2, lines 36-67). Schwonke shows a variable color design and that the flooring is of homogenous construction (claims 7-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the elastomer floor covering of Pfaendner with pigments in

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a design and mineral intergrowth fillers of a homogenous construction since it is known that such a mixture provides decorative color and an effective filler for the flooring to provide for a consistent composition for the flooring.

Response to Arguments

Applicant's arguments filed 07-19-04 have been fully considered but they are not persuasive. Applicant argues Pfaendner does not disclose a grafted copolymer such as MAG-g-HDPE with polyolefin but teaches polyolefin with the reaction product of a compatibilizer as MAH-g-HDPE with a stabilizer. Applicant further argues Pfaendner et al. discloses combining polyolefins with the reaction product of a compatibilizer such as MAH-PHDPE with a stabilizer compound selected from group consisting of sterically hindered phenols, sterically hindered amines, lactones, sulfide, phosphites, benzotriazoles, benzophenones and z-tz-hydroxyphenyl-1,3,5-tetrazines, which compounds contain at least one functional reactive group (col. 2, lines 20-29., col. 15, line 65-col. 20, line 4%. discloses reacting "A" (a compatibilizer) + "B" (a stabilizer) to give "C" (a compatibilizer/stabilizer), and then mixing "C" with selected polyolefins. Applicant further argues the PTO misinterprets Pfaendner et al. as disclosing mixing "A" (a compatibilizer) with selected polyolefins. Applicant further argues nowhere does Pfaendner et al. teach or suggest mixing compatibilizers such as MAH-g-HDPE with a polyolefin such as ULDPE. The Applicant has not persuasively argued because nothing in claim 1 differentiates from Pfaendner as to the grafted copolymer. Pfaendner discloses a grafted copolymer. The instant claim 1 language fails to exclude the grafted copolymer of the reference, regardless that the reference copolymer is further derivatized. In the broad sense, the MAH-g-HDPE reads on the "grafted

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copolymer" of the claim, since there is nothing recited in the claim to differentiate the product from the grafted copolymer. See columns 20-24 of Pfaendner. Within these columns Pfaendner teaches the same MAH-g-VLDPEs and polyolefins. Schwonke is used to show the VLDPEs of Pfaendner having the density requirements of the instant claims. To the use of filler, as previously set forth, Schwonke teaches. All other arguments to claims 9 and 14-15 are moot in view of the rejection and arguments presented above that support use of Pfaendner.

Conclusion

~~Applicant's amendment necessitated the new ground(s) of rejection presented in this~~
~~Office action. Accordingly, THIS ACTION IS MADE FINAL.~~ See MPEP § 706.07(a).

7.10
ca 14/14

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

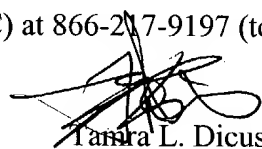
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tandra L. Dicus
Examiner
Art Unit 1774

10/12/04



RENA DYE
SUPERVISORY PATENT EXAMINER

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10/14/04